

AMENDMENTS TO THE CLAIMS

CLAIM 1 (CURRENTLY AMENDED): An apparatus for reducing an engaging force of an engaging member for a bicycle component comprising:

a first engaging member ~~that pivots around an axle mounted to the first engaging member so that the axle is carried by the first engaging member and moves therewith;~~

a movable second engaging member that moves in a first direction and in a second direction opposite the first direction;

wherein the first engaging member engages the second engaging member; and

a biasing mechanism that applies a biasing force to the first engaging member at a first biasing location on the first engaging member so that the first engaging member engages the second engaging member;

wherein, while the first engaging member engages the second engaging member and the second engaging member moves, the biasing mechanism changes the location of the application of the biasing force from the first biasing location on the first engaging member to a different second biasing location on the first engaging member so that an engaging force applied between the first engaging member and the second engaging member when the biasing mechanism applies the biasing force to the second biasing location is less than the engaging force applied between the first engaging member and the second engaging member when the biasing mechanism applies the biasing force to the first biasing location; and

~~wherein movement of the first engaging member in response to movement of the second engaging member causes the axle to move so as to change a distance between the axle and the location of the application of the biasing force on the first engaging member~~

wherein the biasing force is always applied to the first engaging member as the second engaging member moves through the entire range of operating movement of the second engaging member in the first and second directions.

CLAIM 2 (CANCELED).

CLAIM 3 (PREVIOUSLY PRESENTED): The apparatus according to claim 1 wherein the second engaging member comprises a positioning unit for a bicycle shift control device.

CLAIM 4 (ORIGINAL): The apparatus according to claim 3 wherein the first engaging member comprises a positioning member that engages the positioning unit to maintain the positioning unit in a selected position.

CLAIM 5 (ORIGINAL): The apparatus according to claim 4 wherein the biasing mechanism applies the biasing force to the positioning member.

CLAIM 6 (PREVIOUSLY PRESENTED): The apparatus according to claim 5 wherein the positioning member and the biasing mechanism move relative to each other to reduce the biasing force when the positioning unit moves.

CLAIM 7 (ORIGINAL): The apparatus according to claim 6 wherein the positioning member moves in response to movement of the positioning unit.

CLAIM 8 (PREVIOUSLY PRESENTED): The apparatus according to claim 7 wherein the positioning member moves relative to the biasing mechanism when the positioning unit moves so that the biasing mechanism applies the biasing force to the different second biasing location.

CLAIM 9 (ORIGINAL): The apparatus according to claim 8 wherein the positioning member moves together with the positioning unit when the positioning unit moves.

CLAIM 10 (PREVIOUSLY PRESENTED): The apparatus according to claim 9 wherein movement of the positioning member causes the biasing mechanism to apply the biasing force to the different second biasing location.

CLAIM 11 (ORIGINAL): The apparatus according to claim 7 wherein the positioning unit comprises a plurality of positioning teeth, and wherein the positioning member comprises a positioning pawl that engages selected ones of the plurality of positioning teeth to maintain the positioning unit in the selected position.

CLAIM 12 (PREVIOUSLY PRESENTED): The apparatus according to claim 11 wherein the positioning unit and the positioning pawl move relative to each other so that the positioning pawl moves over at least one of the plurality of positioning teeth, and wherein the biasing mechanism applies the biasing force to the different second biasing location so that the biasing force is reduced when the positioning member moves over the at least one of the plurality of positioning teeth.

CLAIM 13 (ORIGINAL): The apparatus according to claim 12 wherein the biasing mechanism increases the biasing force to the positioning member after the positioning member moves over the at least one of the plurality of positioning teeth.

CLAIM 14 (ORIGINAL): The apparatus according to claim 13 wherein the biasing mechanism applies the biasing force to substantially the same biasing location before and after the positioning member moves over the at least one of the plurality of positioning teeth.

CLAIM 15 (PREVIOUSLY PRESENTED): The apparatus according to claim 14 wherein the positioning pawl moves relative to the biasing mechanism when the positioning unit moves so that the biasing mechanism applies the biasing force to the different second biasing location.

CLAIM 16 (ORIGINAL): The apparatus according to claim 15 wherein the positioning pawl moves together with the positioning unit when the positioning unit moves.

CLAIM 17 (PREVIOUSLY PRESENTED): The apparatus according to claim 16 wherein movement of the positioning member causes the biasing mechanism to apply the biasing force to the different second biasing location.

CLAIM 18 (ORIGINAL): The apparatus according to claim 17 further comprising a mounting member that supports the positioning unit and the positioning pawl, and wherein the biasing mechanism is secured relative to the mounting member.

CLAIM 19 (ORIGINAL): The apparatus according to claim 18 wherein the positioning unit rotates to move the positioning pawl.

CLAIM 20 (ORIGINAL): The apparatus according to claim 19 wherein the biasing mechanism comprises a spring.

CLAIM 21 (ORIGINAL): The apparatus according to claim 20 wherein the biasing mechanism comprises a coil spring.

CLAIM 22 (WITHDRAWN): The apparatus according to claim 20 wherein the biasing mechanism comprises a leaf spring.

CLAIM 23 (PREVIOUSLY PRESENTED): The apparatus according to claim 1 wherein movement of the second engaging member causes the biasing mechanism to reduce the biasing force applied to the first engaging member.

CLAIM 24 (PREVIOUSLY PRESENTED): The apparatus according to claim 1 wherein the biasing force applied by the biasing mechanism changes from a first value to a second value while the second engaging member is moving and the first engaging member is contacting the second engaging member.

CLAIM 25 (CANCELED).

CLAIM 26 (PREVIOUSLY PRESENTED): The apparatus according to claim 7 wherein the positioning member moves around a rotational axis of the positioning unit in response to movement of the positioning unit.

CLAIM 27 (NEW): An apparatus for reducing an engaging force of an engaging member for a bicycle component comprising:

a first engaging member;

a movable second engaging member;

wherein the first engaging member engages the second engaging member; and

a biasing mechanism that applies a biasing force to the first engaging member at a first biasing location on the first engaging member so that the first engaging member engages the second engaging member;

wherein only a biasing force that biases the first engaging member towards the second engaging member is applied to the first engaging member; and

wherein, while the first engaging member engages the second engaging member and the second engaging member moves, the biasing mechanism changes the location of the application of the biasing force from the first biasing location on the first engaging member to a different second biasing location on the first engaging member so that an engaging force applied between the first engaging member and the second engaging member when the biasing mechanism applies the biasing force to the second biasing location is less than the engaging force applied between the first engaging member and the second engaging member when the biasing mechanism applies the biasing force to the first biasing location.

CLAIM 28 (NEW): An apparatus for reducing an engaging force of an engaging member for a bicycle component comprising:

a first engaging member that pivots around an axle coupled to the first engaging member;

a movable second engaging member;

wherein the first engaging member engages the second engaging member; and

a biasing mechanism that applies a biasing force to the first engaging member at a first biasing location on the first engaging member so that the first engaging member engages the second engaging member;

wherein, while the first engaging member engages the second engaging member and the second engaging member moves, the biasing mechanism changes the location of the application of the biasing force from the first biasing location on the first engaging member to a different second biasing location on the first engaging member so that an engaging force applied between the first engaging member and the second engaging member when the biasing mechanism applies the biasing force to the second biasing location is less than the engaging force applied between the first engaging member and the second engaging member when the biasing mechanism applies the biasing force to the first biasing location; and

wherein at least one of the first biasing location or the second biasing location is positioned between the axle and the location where the first engaging member engages the second engaging member.